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**VIA EMAIL AND U.S. POST**

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Bob Perciaspe, Acting Administrator  
U.S. Environmental Protection Agency  
Office of Environmental Information (OEI)  
(Mail Code: 28221T)  
Docket # EPA-HQ-ORD-2013-0189  
1200 Pennsylvania Ave., N.W.  
Washington, DC 20460

Re: Comments of the North Coast Rivers Alliance ("NCRA")  
on the Bristol Bay Draft Assessment

Dear Acting Administrator Perciaspe:

In accordance with the Environmental Protection Agency's ("EPA's") notice inviting public comment on its "Assessment of Potential Mining Impacts on Salmon Ecosystems of Bristol Bay, Alaska" (EPA-910-R-12-004a-d) (the "Assessment"), we submit the following comments on behalf of the North Coast Rivers Alliance ("NCRA"). NCRA is an unincorporated association of conservation leaders from the western and northern United States and Canada. NCRA has participated in public education, advocacy before legislative and administrative tribunals, and litigation in state and federal courts to enforce compliance by state and federal agencies and private entities with state and federal environmental laws.

It is clear from EPA's Assessment that the proposed Pebble Mine poses severe and unacceptable impacts on the irreplaceable world-class fisheries of Bristol Bay and its tributary watersheds. As further documented in the U.S. Fish and Wildlife Service's ("USFWS") concurrent assessment annexed as Appendix C to the Assessment, "Wildlife Resources of the Nushagak and Kvichak River Watershed," the Pebble Mine project presents a grave threat to these watersheds' fish and wildlife and the Alaska Native communities and cultures that depend on them for their subsistence and survival.

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It also appears from the Assessment that the ecological threats posed by the Pebble Mine cannot be mitigated to insignificance. They are in fundamental and irreconcilable conflict with the Clean Water Act. Accordingly, EPA should exercise its authority under section 404 of the Clean Water Act to disapprove the Pebble Mine.

Although the Assessment as written already provides an ample basis for disapproving the Pebble Mine, we encourage EPA to expand the breadth and depth of its analysis. First, the Assessment is unduly narrow in scope. It restricts its analysis to the effects of mining on fisheries, and does not fully examine mining's equally severe impacts on other wildlife. Second, the Assessment does not consider the additional development that would accompany mining projects. Third, the Assessment understates the risks of mining by failing to consider the potential for and effects of foreseeable discharges of mining waste to waters of the United States due to operator error, equipment malfunction, severe weather, earthquakes and other natural and manmade hazards and accidents. Consequently, the Assessment fails to address the virtual certainty that the Pebble Mine will cause large scale and irreversible discharges into Bristol Bay and its tributary watersheds of the many harmful pollutants that are associated with large-scale mining and the related developments it will induce.

#### **THE SCOPE OF THE ASSESSMENT IS TOO NARROW.**

EPA states that the Assessment is intended to "determine the significance of Bristol Bay's ecological resources and evaluate the impacts of large-scale mining on these resources." Assessment ES-1. This is an appropriate objective for EPA's review and analysis. However, as written the Assessment falls far short of this objective.

First, the Assessment is limited to examining the effect of mining on fisheries and water quality, and considers the effects of mining on other wildlife, and on Alaska Natives, "only as affected by changes in salmonid fisheries." Assessment ES-2. Because the Assessment focuses only on mining's effects on salmon, it ignores its impacts on other wildlife. Yet wildlife other than fish is surely an "ecological resource" of Bristol Bay, and would be directly affected by mining and its accompanying development. For example, mines would initially require an estimated 86 mile transportation corridor, including a gravel road and four pipelines. Assessment ES-10. Roads and pipelines harm wildlife by: disrupting migration, nesting and foraging; degrading and fragmenting habitat; disturbing watershed flow and drainage; causing leaks of oil and other contaminants; triggering soil erosion and stream sedimentation; creating disruptive noise and night-time glare; and by killing and injuring wildlife through collisions with trucks and other vehicles. Yet the Assessment neglects to even mention these effects.

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Second, the Assessment inexplicably excludes from its scope the additional development that would be necessary to *support* the Pebble Mine, and the further secondary development that the mine would *induce*. The Assessment states that it does not consider the “impacts of the one or more large-capacity, electricity-generating power plants *that would be required* to power the mine and the port. It also does not assess the effects of induced development that could result from large-scale mining in the region.” Assessment ES-4, emphasis added. The Assessment also excludes from analysis a potential underground extension that would almost double the size of the mine under even the largest scenario – and increase the size of the mine under the smallest scenario almost *fifty-fold*. Assessment ES-10.

Because the Assessment ignores necessary and foreseeable development that the mine would create, it greatly understates the impacts of mining on fisheries, on other ecological resources, and on Alaska Native communities.

#### **THE ASSESSMENT FAILS TO CONSIDER THE EFFECTS OF THE MOST SERIOUS FORESEEABLE ACCIDENTS.**

The Assessment also understates the foreseeable environmental impacts of mining development by assuming that there will be “no significant human or engineering failures.” Assessment ES-11. However, failures – both human and engineering – are eminently foreseeable and, in the case of massive resource extraction projects in hostile environments, commonplace. And when they happen, they can trigger catastrophic and irreversible ecological damage. Therefore, the Assessment should evaluate the possibility of foreseeable human and engineering failures, discuss the foreseeable impacts of such failures, and analyze the feasibility of responding to and mitigating them and rectifying the damage caused.

Where the Assessment does discuss certain types of failures, it does not discuss worst-case scenarios. For example, the Assessment models the effects of tailings dam failures, but only offers a “conservative estimate” of the quantity of tailings that would be released, Assessment ES-17, and acknowledges later that the amount spilled could be *much larger*. Assessment ES-28. Nowhere does the Assessment explain why it based its analysis on so-called “conservative” assumptions. Such assumptions have no place in a document whose purpose is to fairly and *fully* disclose the *foreseeable* ecological effects of mining on Bristol Bay, its tributary watersheds, and the fish, wildlife and Native Alaska communities and cultures that depend on them.

In addition, the Assessment fails to discuss the dangers of acid mine drainage. When sulfide deposits are exposed to the elements, they react with water and oxygen to produce sulfuric acid. This acid effluent seeps into the surrounding environment, contaminating soil and groundwater. Once acid mine drainage starts, it is virtually impossible to stop, and experience has shown us just how dangerous it is. For example, prior to a massive cleanup effort, acid drainage from the Iron Mine near Redding in Northern California flowed out of the site, killing

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virtually all aquatic life in the creeks draining the area. After storms, contaminated water reached the Spring Creek and Keswick Reservoirs, and altered the chemistry of the Sacramento River, placing productive salmon fisheries at risk. With no way to prevent the formation of acid mine drainage, water treatment must occur on site, and Iron Mountain will continue to produce acid drainage until the millions of tons of sulfide deposits in the mountain are gone – *2,500 to 3,000 years* from now. The vastly greater sulfide deposits that the Pebble Mine would expose to the elements would produce deadly acid mine drainage for *tens of thousands of years*, permanently destroying not only Bristol Bay's world class salmonid fisheries, but all fish and wildlife dependent on the rivers that drain into the bay.

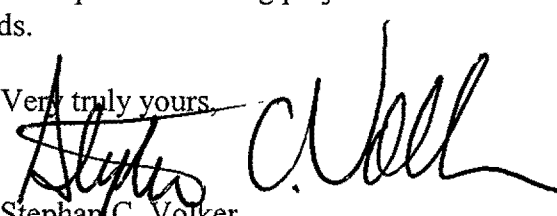
### CONCLUSION

The Assessment demonstrates that the proposed Pebble Mine poses unacceptable risks to Bristol Bay's world class salmonid fishery. Therefore EPA must exercise its authority under section 404 of the Clean Water Act to disapprove this misguided proposal.

EPA should also expand and correct its Assessment to analyze the effects of mining on *all* of Bristol Bay's ecological resources and its Alaska Native communities. The Assessment should be revised to discuss the potential impacts of the massive foreseeable development that would accompany mining, such as power plants, a deep-water port on Cook Inlet, support services for mine employees and their families, and the additional development that increased access to the area would induce. EPA should also address the potential for major human or engineering failures and their ecological consequences. In addition, EPA should model worst-case scenario failures rather than blithely assuming that "conservative estimates" provide an accurate picture of the effects of foreseeable accidents.

Only by enlarging the scope of the Assessment in these ways can the document provide a full picture of the disastrous foreseeable impacts of mining projects such as the Pebble Mine on Bristol Bay and its tributary watersheds.

Very truly yours,

  
Stephan C. Volker

Attorney for North Coast Rivers Alliance

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